



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,823	08/31/2001	Bernd Borchert	32226.12	3378

7590 12/03/2003
Craig Gregersen
Briggs and Morgan, P.A.
W2200 First National Bank Building
St. Paul, MN 55101

EXAMINER

FLORES RUIZ, DELMA R

ART UNIT	PAPER NUMBER
----------	--------------

2828

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,823

Applicant(s)

BORCHERT, BERND

Examiner

Delma R. Flores Ruiz

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 9 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seki et al (5,553,089) in view of Lear (5,633,527).

Regarding claims 1, 3, 4, 9, and 10, Seki discloses a method and apparatus semiconductor laser chip having a semiconductor laser element (see Fig. 10, Character 60) and a beam shaper (see Figs. 10, Character 102) integrated into the semiconductor laser chip and serving to shape a laser beam emitted by the semiconductor laser element, and trench (see Fig. 10, Character 100) introduced between the semiconductor laser element and the beam shaper the semiconductor laser element being configured as an FB semiconductor laser element (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a the semiconductor laser element being

configured a an FB semiconductor laser element, because the semiconductor light-emitting device (Fabry-Perot type semiconductor laser) which has been conventionally used as inspection light source for semiconductor laser apparatus, and therefore said limitations are said to be inherently disclosed in the teachings of Seki) the beam shaper being arranged in a manner integrated in the semiconductor laser element in the exit direction (see Fig. 10,) of a laser beam emitted by the semiconductor laser element, such that the emitted laser beam is guided thought the beam shaper (see Figs. 10,Abstract). Regarding claim discloses the claimed invention except for a beam shaper having a predetermined concentration profile of oxidized aluminum and beam shaper has containing-containing material, the beam shaper has at least one material combination selected from the group consisting of indium gallium aluminum antimonide, gallium aluminum arsenide antimonide and indium aluminum arsenide antimonide. It would have been obvious at the time of applicant's invention, to combine Lear of teaching a beam shaper having a predetermined concentration profile of oxidized aluminum and beam shaper has containing-containing material, the beam shaper has at least one material combination selected from the group consisting of indium gallium aluminum antimonide, gallium aluminum arsenide antimonide and indium aluminum arsenide antimonide with semiconductor laser chip because it would have been obvious to one having ordinary skill in the art at the time the invention was made to a beam shaper having a predetermined concentration profile of oxidized aluminum and beam shaper has containing-containing material, the beam shaper has at least one material

combination selected from the group consisting of indium gallium aluminum antimonide, gallium aluminum arsenide antimonide and indium aluminum arsenide antimonide, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 2, Seki discloses a beam shaper is monolithically integrated in the semiconductor laser chip, (see Figs. 10, and abstract).

Claim 5, is rejected under 35 U.S.C. 103(a) as being unpatentable over Seki et al (5,553,089) in view of Lear (5,633,527) further in view of Hargis (5,802,086).

Regarding claim 5, Seki in view of Lear discloses the claimed invention except for the trench has width of at most 15 μm between the edge of the semiconductor laser element from which the laser beam is emitted and the beam input end surface of the beam shaper. It would have been obvious at the time of applicant's invention, to combine Hargis of teaching a the trench has width of at most 15 μm between the edge of the semiconductor laser element from which the laser beam is emitted and the beam input end surface of the beam shaper with semiconductor laser chip because it would have been obvious to one of ordinary skill in the art at the time the invention was made

to the trench has width of at most 15 μm between the edge of the semiconductor laser element from which the laser beam is emitted and the beam input end surface of the beam shaper, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

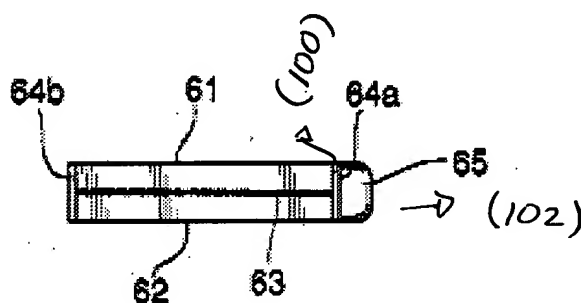


FIG. 10

Trench (100)

Beam shaper (102)

Response to Arguments

Applicant's arguments filed 9/16/2003 have been fully considered but they are not persuasive. Applicant's arguments with respect to claims 1 – 5, and 9 - 10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.


Delma R. Flores Ruiz
Examiner
Art Unit 2828
DRFR/PI
December 1, 2003


Paul Ip
Supervisor Patent Examiner
Art Unit 2828